DRAFT REPORT

Health and Safety



November 25, 2003

Mr. Clay Stucki, Esq. Bennett, Tueller, Johnson, & Deere 3865 South Wasatch Blvd. Salt Lake City, Utah 84109

Subject:

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Initial Investigation of Possible Asbestos Contamination

Utah Paper Box – 340 West 200 South, Salt Lake City, Utah

Dear Mr. Stucki:

The Utah Paper Box (UPB) facility in downtown Salt Lake City is located south of the former Vermiculite Intermountain Facility identified by the US EPA as one of the "Libby Sister Sites". The EPA Region 8 On-Scene Coordinator Mr. Floyd Nichols has informed UPB Vice President – Operations Steve Salazar that EPA is interested in collecting environmental samples the facility to determine if the previous activities at the vermiculite plant contaminated the UPB facility with amphibole asbestos.

The EPA protocol is designed to look for asbestos in soil, dust and airborne fibers that originated in the vermiculite mined in Libby Montana. The specific forms of asbestos found in this vermiculite deposit are Actinolite and Tremolite asbestos from the amphibole family of minerals. The processing of vermiculite released the asbestos fibers that were then able to migrate from the processing plant to adjacent properties.

Portions of the UPB facility were in operation during the time frame of the vermiculite processing and are therefore at risk of having been contaminated with asbestos fibers. Sampling performed by the EPA investigation team October 14 – 16, 2003 found that the Artistic Printing facility and a Utah Power & Light building, both located north west of UPB, were contaminated at varying levels with asbestos fibers consistent with the Libby amphibole asbestos.

Mr. Salazar was interested in obtaining as much information on the condition of the UPB facilities as soon as possible. Health and Safety Services was retained by Bennett, Tueller, Johnson, & Deere to assist UPB in performing an initial site assessment. The scope of the sampling was intended to mirror the investigative methodology used by the EPA in evaluating asbestos contamination stemming from former vermiculite processing facilities.

The UPB facility has undergone several significant renovations over the past 80 years of operation at this site. Of the existing facility today, there are three locations that have not been cleaned or renovated in a fashion that would have removed contamination that may have migrated from the vermiculite operation. These areas have not been cleaned or renovated since before 1990. All three locations are along the south side of the facility, below the roof deck, and above the first floor ceiling level.

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The oldest un-cleaned/un-renovated area is located above the main level offices at the west end of the office complex and north of the second floor offices. The next area moving east is located above the offices in a "storage area" accessible via a staircase west of the north west corner of the "Break Room". The final area is above the enclosed office area in the southeast corner of the facility.

Mr. Salazar stated that the greatest concern of UPB is the existing air quality within the facility. On November 17, 2003 air sampling was conducted in three locations directly north of the three locations listed above. An additional sampling location was set outside the building to the southwest and upwind from the facility. Samples were collected on 0.45 micron mixed cellulose ester 25 mm diameter cassettes and analyzed using the transmission electron microscopy methodology detailed in the Asbestos Hazard Emergency Response Act (AHERA) regulations found in 40 CFR 763 and included in the EPA protocols for the Libby Sister Site investigations.

Due to the unknown level of dust in the environment and the high volume of air called out in the Libby Sister Site investigation protocol (4200 liters) three samples were collected at each location. One sample at the upper end of the AHERA recommended range of 1800 liters and a second sample of approximately 2500 liters, and the third at the 4200 liter range.

At the completion of the air sample collection microvac samples and bulk samples of the settled dust were collected from four locations: one above the west end of the offices, one west of the Break Room, one over the Break Room and the final sample over the west end of the offices in the southeast corner.

Sample Data

The following summary table presents the findings of the area air, microvac, bulk, and personal air samples collected on November 17, 2003

Type and Location	Sample #	Results
TEM Area Air Samples, north of the	-AA-01	<22.0 S/mm ² , <0.005 f/cc
southeast offices	-AA-07	<22.0 S/mm ² , <0.003 f/cc
TEM Area Air Samples, northwest corner	-AA-03	<22.0 S/mm ² , <0.005 f/cc
of the Break Room	-AA-08	<22.0 S/mm ² , <0.003 f/cc
TEM Area Air Samples, corridor north of	-AA-05	<22.0 S/mm ² , <0.005 f/cc
the western most office complex	-AA-09	<22.0 S/mm ² , <0.003 f/cc
TEM Area Air Samples, outside the	-AA-10	<22.0 S/mm ² , <0.005 f/cc
building south of southwest loading dock	-AA-12	<22.0 S/mm ² , <0.003 f/cc
TEM Microvac, above southeast office	-DU-01	None Detected
complex		
TEM Microvac, above Break Room near	-DU-02	None Detected
southeast door		
TEM Microvac, above central office	-DU-03	None Detected
complex		

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Type and Location	Sample #	Results
TEM Microvac, above west end of the office complex and north of the second floor offices	-DU-04	None Detected
PLM Bulk Sample, above southeast office complex	-DU-05	None Detected
PLM Bulk Sample, above Break Room near southeast door	-DU-06	None Detected
PLM Bulk Sample, above central office complex	-DU-07	None Detected
PLM Bulk Sample, above west end of the office complex and north of the second floor offices	-DU-08	None Detected
PCM Personal Exposure TWA Sample, during Microvac and Dust sampling	-AA-13	0.011 f/cc (LOQ 0.016 f/cc)
PCM Personal Exposure STEL Sample, during Microvac and Dust Sampling	-AA-14	<0.024 f/cc (LOQ 0.043 f/cc)

S/mm² = structures per millimeter squared; f/cc = fibers per cubic centimeter

All analytical work was performed by MACS Laboratory, Santa Clara, California, a NVLAP accredited laboratory.

Discussion

All of the area air samples analyzed by transmission electron microscopy were free of asbestos.

The personal exposure sampling conducted on Tad Ogden while collecting the microvac and bulk dust samples was within the OSHA permissible exposure level (PEL) for both the time weighted average (TWA) of 0.1 f/cc and the short term exposure level (STEL) of 1.0 f/cc. The PCM or phase contrast microscopy method used for OSHA compliance sample analysis is not specific for asbestos fibers but the result counts all particles with a 3:1 length to width ratio. The "fibers" counted do not necessarily mean that asbestos fibers were found in the samples.

Each of the bulk and microvac samples were collected from 100 square centimeter areas where dust had been allowed to settle for up to decades. No asbestos was found within any of the samples. While this sampling represents only a small portion of the entire plant (a total of 800 square centimeters investigated) the fact that no asbestos was found on either TEM or PLM analysis is significant.

Signature:

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